



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,307	03/16/2001	Robert K. Smith	T8-464854US	5399

7590 10/22/2002

Gowling Lafleur Henderson LLP
Suite 4900
Commerce Court West
Toronto, ON M5L 1J3
CANADA

EXAMINER

HORTON, YVONNE MICHELE

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/809,307

Applicant(s)
ROBERT K. SMITH

Examiner
YVONNE M. HORTON

Art Unit
3635



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 31, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Application/Control Number: 09/809,307

Art Unit: 3635

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "knob-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, and 7 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,860,510 to Kotler.

Kotler clearly shows a tile that includes all the limitations recited in claims 1, 3, 4, and 7.

With regard to claim 1: Kotler shows a tile (10) with an upper surface of flooring material (12), a rigid lower member (11), which has a plurality of support legs (19) that allow water to

substantially flow under for purposes of draining, and is designed to interlock with other similar tiles in a connection means (22, 23) around the perimeter of the tile.

With regard to claim 3: Kotler discloses the above tile (10) as having a lower member that is a plastic sheet grid (11).

With regard to claim 4: Kilter states that said lower member of plastic sheet grid (11) that may be fabricated from any of many resilient plastics, including polyethylene. (See column 4, lines 65 - 68.)

With regard to claim 7: Kilter shows a tile (11) with an upper surface of flooring material (12), which may be adhesively attached to the rigid lower member. (See column 5, lines 20 - 23.)

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 5, 6, 8, 9, 11, and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kilter in view of U.S. Patent No. 3,902,293 to Witt et al.

With regard to claim 2: Kilter shows a tile (10) with an upper surface of flooring material (12), a rigid lower member (11), which has a plurality of support legs (19) that allow water to substantially flow under for purposes of draining, and is designed to interlock with other similar tiles in a connection means (22, 23) around the perimeter of the tile. Kilter, however, does not show wafer board as one of the component layers.

Witt discloses a tile (10) with an upper layer of wafer board (13, 151, 152), which is designed with the same basic properties in mind, namely, to provide a multi-layered tile, with a rigid portion, i.e. the wafer board, (see column 2, lines 22 - 24) that is meant

to allow for drainage and venting of moisture. While Witt's tile is not raised on projections, the lower layer provides a cushion that allows draining and venting of moisture to occur through tiles spaces (see column 3, lines 42 - 52), which is the primary function of the support legs disclosed by Kilter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tile of Kilter to include a layer of wafer board for purposes of rigidity.

With regard to claim 5: Kilter discloses the aforementioned tile (10) as having a lower member (11) that is a plastic sheet grid, however, the wafer board is not part of his disclosure. Witt's inclusion of wafer board (13, 151, 152) in the design of his tile shows a plastic bottom layer (11) that permits venting of moisture from the sub-floor. Since both Kilter and Witt show the bottom layer as plastic, it would have been obvious to modify Kilter's tile to include wafer board, as discussed in relation to claim 2 above.

With regard to claim 6: As previously mentioned, Kilter states that said lower member of plastic sheet grid (11) may be fabricated from any of many resilient plastics, including polyethylene. Applicant's design shows this tile with a wafer board layer, which Witt discloses in his patent of a similar tile design. It would have been obvious to one of ordinary skill to include wafer board in Kilter's design as presented in Witt.

With regard to claim 8: Kilter shows a tile (10) with an upper surface of flooring material (12), which may be adhesively attached to the rigid lower member (11). Kilter does not, however, include wafer board in his tile. Witt discloses a tile (10) with an upper layer of wafer board (13, 151, 152) with a wear resistant layer, which may include fire retardant and plastic coatings, which then may be adhesively bonded a plastic

bottom layer that permits venting of moisture from the sub-floor. (See column 2, lines 10 - 12, 22 - 24, 29 - 34, and column 5, lines 62 - 64.)

With regard to claim 9: Kilter shows a tile (10) with an upper surface of flooring material (12), a rigid lower member (11), which has a plurality of support legs (19) that allow water to substantially flow under for purposes of draining, and is designed to interlock with other similar tiles in a connection means (22, 23) around the perimeter of the tile. Kilter, however, does not show wafer board as one of the component layers nor a tongue and groove connection means. While said connection means (22, 23) themselves appear as a series of miniature tongue (22) and groove (23) parts, they are in fact not the classic tongue and groove. Witt's tile (10) includes the wafer board (13, 151, 152) as well as a tongue (153) and groove (154). See Figs. 9 and 10, column 7, lines 53 - 54, and column 10, lines 13 - 16 for the teaching "whereby grooves are formed along two corner-meeting edges and whereby overhanging tongues are formed along the other two corner-meeting edges." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tile of Kilter to include a layer of wafer board for purposes of rigidity and design as well as to include classic tongue and groove design connection means in lieu of the individual connection means to interlock tiles. Rather than produce a series of individual miniature tongues and grooves as Kilter has, a continuous tongue and groove as shown in Witt would be both simpler and more economical to manufacture.

With regard to claim 11: Kilter shows a tile (10) with an upper surface of flooring material (12), a rigid lower member (11), which has a plurality of support legs (19) that allow water to substantially flow under for purposes of draining, and is designed to

interlock with other similar tiles in a connection means (22, 23) around the perimeter of the tile. Kilter does not show two adjacent tongue and groove connection means on the tiles. Witt presents an alternate embodiment of the floor tile with a tongue and groove on two adjacent sides, as shown in Figs. 9 and 10 and described in columns 7 and 8, specifically "the two tongues and their respective grooves," column 7, line 62. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tile of Kilter to include two adjacent tongue and groove design connection means in lieu of the individual connection means to interlock tiles for ease of connecting tiles.

With regard to claim 12: Kilter shows a tile (10) with an upper surface of flooring material (12), a rigid lower member of rigid plastic sheet grid (11) that may be fabricated from any of many resilient plastics, including polyethylene, which has a plurality of support legs (19) that allow water to substantially flow under for purposes of draining, and is designed to interlock with other similar tiles in a connection means (22, 23) around the perimeter of the tile. Kilter, however, does not show wafer board as one of the component layers nor a tongue and groove connection means. Witt's tile (10)

includes the wafer board (13, 151, 152) as well as two adjacent edge tongues (153) and grooves (154) as an alternate embodiment. (See Figs. 9 and 10 and column 10, lines 13 - 16 for the teaching "whereby grooves are formed along two corner-meeting edges and whereby overhanging tongues are formed along the other two corner-meeting edges.") Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tile of Kilter to include a layer of wafer board for

purposes of rigidity and design as well as to include two adjacent edge tongue and groove connection means to interlock tiles. Rather than produce a series of individual miniature tongues (22) and grooves (23) as Kilter has, two adjacent edge tongue and groove connection means, as shown in Witt, would be both simpler and more economical to manufacture, as Witt describes in columns 7 and 8, specifically "the two tongues and their respective grooves," column 7, line 62.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kilter in view of U.S. Patent No. 3,388,516 to Thielen.

Kilter shows a tile (10) with an upper surface of flooring material (12), a rigid lower member (11), which has a plurality of support legs (19) that allow water to substantially flow under for purposes of draining, and is designed to interlock with other similar tiles in a connection means (22, 23) around the perimeter of the tile. Kilter's connection "means are provided around the perimeter of the support grid to allow attachment of additional grids in an interlocking manner." (See U.S. Patent No. 4,860,510 to Kilter: Abstract.) Said connection means themselves are a series of miniature tongue (22) and groove (23) design components.

Kilter does not offer an alternative design to include that of a spline and groove. Thielen shows a multi-layered tile designed to interlock with other similar tiles and is raised above the sub-floor, "which renders possible such a ventilation of the floor that there does not occur any consideration of water." (See Thielen, column 4, lines 48 - 50.) In Fig. 6, Thielen shows one embodiment with a triangular-shaped tongue and groove design, and another with a key (30) and groove (32) in Figs. 7, 8, and 10. It would have

been obvious to anyone of ordinary skill in the art at the time the invention was made to modify the tile disclosed by Kilter to include a key and groove as described by Thielen. Such key is a connection means that, like the tongue and groove, offers a simple, economical alternative manufacturing solution over Kotler's individual connection means design.

Claim 10 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Kilter in view of U.S. Patent No. 5,182,891 to Slocum.

Slocum discloses a tile (50) designed to be raised above the sub-floor in order to overcome moisture problems. The interlocking mechanism is a tongue and groove design employing a separate key portion (6) to be inserted between the communicating tiles. While in this patent the keys also serve as feet to raise the tiles above the subfloor, it is an obvious teaching to Kotler's disclosure. With reference to the applicant's Figs. 7 and 8: While the applicant's drawing of the groove and key show the key inserted fully between two connecting tiles, thus providing the missing "tongues" otherwise shown elsewhere (See Figs. 2 - 6 of applicant's file), Slocum's key serves a similar function in its use of the key while at the same time raising it and eliminating the need for additional feet along the bottom surface of the tiles. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tile of Kilter to include a key and groove system in order to connect the tiles and at the same time eliminate the need for incorporating the manufacture of multiple support legs by having the keys raise the connected tiles.

Response to Arguments

Applicant's arguments filed 7/31/02 have been fully considered but they are not persuasive. In regards to the applicant's argument that KOTLER '510 does not teach the use of a waterproof sheet, KOTLER '510 clearly details in column 5, lines 36-51, that his sheet is made from a foamed polymer material. This type of material is very well known in the art for its ability to be waterproof.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., random wafer board) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the connectors of KOTLER' 510 are "unsuitable" for use as an underlying floor, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In regards to the applicant's argument that WIIT teaches diffusion which implies that the structure must be porous, diffusion does not imply porosity. Diffusion may imply evaporation, but not porosity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.

YMH
Patent Examiner
10/21/02

A handwritten signature in black ink, appearing to be 'YMH' with a long horizontal flourish extending to the right.